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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/034,941 | 12/21/2001 | Peter Gaal | 010404 | 9377 |

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Qualcomm Incorporated
Patents Department
5775 Morehouse Drive
San Diego, CA 92121-1714

| EXAMINER | |
|---|---|
| BARNIE, REXFORD N | |
| **ART UNIT** | **PAPER NUMBER** |
| 2643 | |

DATE MAILED: 03/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/034,941 | GAAL ET AL. | |
| | Examiner | Art Unit | |
| | REXFORD N BARNIE | 2643 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☐ Responsive to communication(s) filed on *21 December 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

RWarnie
REXFORD BARNIE
PRIMARY EXAMINER

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *02/15/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1- are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilhousen (US Pat# 5,970,413) in view of Soliman (US Pat# 6,166,685 or'229) or WO 99/47943).

Regarding claim 1, Gilhousen teaches determining the position of a mobile subscriber in a CDMA cellular telephone system by using propagation times and GPS measurement data in (see col. 8). Gilhousen fails to elaborate in detail about the GPS measurement system.

Soliman '685 teaches a wireless user position update using infrastructure measurements in (see cols. 3-5 and figs.) wherein GPS measurements data in addition to round delay and propagation delay can be used in determining a user's location.

Soliman '229 teaches a system and method for determining the position of a wireless CDMA transceiver in (see col. 2 line 37-62, col. 4 line 51-60, col. 6 lines 15-29, col. 9) by using factors including GPS measurements, time delay, Doppler effect, distance measurement data and so forth as well in determining the location of a mobile unit.

WO 99/47943 teaches a system for determining the position of a wireless CDMA transceiver in (see summary of the invention, page 3-5) by using GPS measurement data in addition to timing information. Furthermore, aiding signals could include satellite identification information, Doppler shift information, distance data, a search window size being calculated based on round rip delay associated also with propagation delay.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of either one of the secondary reference as taught by Soliman into that of Gilhousen thus making it possible to determine effectively location of users for purposes including billing and emergency services.

Regarding claims 2-14, the combination teaches being able to use at least a number of satellites, use thresholds in (see figs. of '685, col. 4 lines 51-60 of '229 and so forth.).

Regarding claim 15, Gilhousen teaches determining the position of a mobile subscriber in a CDMA cellular telephone system by using propagation times and GPS measurement data in (see col. 8). Gilhousen fails to elaborate in detail about the GPS measurement system.

Soliman '685 teaches a wireless user position update using infrastructure measurements in (see cols. 3-5 and figs.) wherein GPS measurements data in addition to round delay and propagation delay can be used in determining a user's location.

Soliman '229 teaches a system and method for determining the position of a wireless CDMA transceiver in (see col. 2 line 37-62, col. 4 line 51-60, col. 6 lines 15-29,

col. 9) by using factors including GPS measurements, time delay, Doppler effect, distance measurement data and so forth as well in determining the location of a mobile unit.

WO 99/47943 teaches a system for determining the position of a wireless CDMA transceiver in (see summary of the invention, page 3-5) by using GPS measurement data in addition to timing information. Furthermore, aiding signals could include satellite identification information, Doppler shift information, distance data, a search window size being calculated based on round rip delay associated also with propagation delay.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of either one of the secondary reference as taught by Soliman into that of Gilhousen thus making it possible to determine effectively location of users for purposes including billing and emergency services.

Regarding claims 16-19, the combination teaches being able to use at least a number of satellites, use thresholds in (see figs. of '685, col. 4 lines 51-60 of '229 and so forth.). Furthermore, according to (see col. 3 of '685) that pilot signals can be accounted for after calibration measurements have been obtained.

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted Prior art (see description of the Related Art, page 1 lines 22-27 and [0007] of page 3) in view of Soliman et al. (US Pat# 6,081,229).

Regarding claim 20, Admitted prior art teaches combining GPS me4asurement data with advanced forward link trilateration data as well known in the art (see description of the Related Art, page 1 lines 22-27 and [0007] of page 3).

Admitted prior art teaches that it's well known in the art to transmit location information to a user. Admitted prior art of record fails to teach monitoring call position data during a call in detail as taught by Soliman who teaches a system and method for determining the position of wireless CDMA transceiver in (see col. 5 and col. 10) where movement of a user can be noted and position information can be transmitted to a mobile unit.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Soliman into that of the admitted prior art thus making user's aware of their position for reason including driving and emergency purposes.

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Soliman (US Pat# 6,166,685) in view of Soliman et al. (US Pat# 6,081,229).

Regarding claim 20, Soliman teaches a wireless user position using infrastruture measurements in (see cols. 3-5) wherein GPS and forward link measurements can be used in determining the position of a user but fails to teach being able to forward position data to a user as taught by Soliman who teaches a system and method for determining the position of wireless CDMA transceiver in (see col. 5 and col. 10) where

movement of a user can be noted and position information can be transmitted to a mobile unit.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Soliman into that of the admitted prior art thus making user's aware of their position for reason including driving and emergency purposes.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **REXFORD N BARNIE** whose telephone number is (703)306-2744. The examiner can normally be reached on M-F 9:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, CURTIS KUNTZ can be reached on (703) 305-4708. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PRIMARY EXAMINER
REXFORD BARNIE, 02/15/05

REXFORD BARNIE
PRIMARY EXAMINER